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ABSTRACT

This literature survey examines trends in higher education requiring a broad base of support from the changing institutions and the people who have to respond to, plan for, and manage the changes. Trends are identified in the areas of enrollment, financial aid, curricula, faculty, financial status, and assessment. Trends affecting enrollment include recruiting practices, increased publicity about institutions, emphasis on student retention, and demographic changes in the pool of potential applicants. Enrollment rates in general are analyzed, with special emphasis to racial/ethnic group students, adult learners, and part-time students. The number of students receiving financial aid has declined, and recipients have shifted from long-term degree programs to short-term vocational programs. Changes in curricula are taking place, especially in the areas of general education and critical thinking skill development. Trends in employment include the increase in the number of part-time faculty, the underrepresentation of minority faculty members, and shortages of faculty in certain subject areas. The financial status of colleges and universities is being impacted by tuition rates, inflation, and faculty salaries. There is also a trend towards increased assessment as businesses and industries demand assurance of the quality of higher education programs. Includes 34 references. (JDD)

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EMERGING TRENDS IN HIGHER EDUCATION

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Throughout the ages, humans have attempted to cope with change in the nature of things, including the institutions they create. Coming to terms with the means to change remains a major preoccupation that is unabated. For institutions of higher education, the problem is not change per se but the management of change. The primary focus of this survey is trends that suggest change in the landscape of higher education but that will require a broad base of support from the two major groups involved: the institutions that might change and the people who have to respond to, plan for, and manage the changes that could emerge. If some of these changes can be anticipated, institutions of higher education will be able to incorporate social, technical, political, and economic trends and shifts in current value systems into their mission and policy goals.

The trends that provided the framework for change in 1989 were patterns of enrollment, financial aid, changes in curricula, college and university faculty, financial status, and assessment. These topics have been the subject of much critical and scholarly literature for several years and in a sense are generic to postsecondary education. New data, however, provide insights about processes to help develop programs and services that define the context for postsecondary institutions today in keeping pace with

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the rapid developments of technology and our society.

PATTERNS OF ENROLLMENT

Declining enrollments have been a major concern of the academic community throughout the 1980s (Baldridge, Kemerer, and Green 1982), enough to contribute to a sense of insecurity in academe. Several trends in managing enrollments will significantly affect enrollment: recruiting practices, increased publicity about institutions, emphasis on student retention, and demographic changes in the pool of potential applicants (El-Khawas 1985, p. 1).

College Matriculation: Since 1965, access to higher education has been a major concern of both the federal government and the individual states (Baldridge, Kemerer, and Green 1982, p. 7). Colleges and universities are regularly grouped by the length of degree programs they offer to address somewhat different needs of students. Enrollment trends in higher education institutions may indicate changing demand for different types of services offered (U.S. Dept. of Education 1988, p. 120).

Between 1970 and 1983, enrollments in colleges and universities rose by 45 percent, from 8.6 million to 12.5 million, and then increased by less than 1 percent from 1983 to 1987. Since 1983, enrollments at all types of institutions have been relatively steady, but in 1986 and 1987 enrollments were up slightly from 1985. In 1989-90, college enrollments are expected to increase by less than 1 percent, to 12.6 million students. Declines in the

cohort aged 18-24 will be offset by increases in college attendance as the result of a surge in the numbers of women, older students, and part-time students attending (U.S. Dept. of Education 1988, p. 120).

Racial, Ethnic, and Age Differences: The actual number of minority youths (African-Americans and Hispanics) aged 18 to 24 will change little between 1980 and 1996, hovering around 5 million. The minority proportion of this age group will increase 26.8 percent over the 16-year period, however, up from 15.3 percent in 1980 to 19.4 percent in 1996 (U.S. Dept. of Education 1988, p. 126). Between 1976 and 1986, enrollment of African-Americans as a percentage of enrollments in higher education declined by 0.8 percent. During the same period, the proportion of Hispanics increased by 0.8 percent (U.S. Dept. of Education 1988, p. 124).

Equal access for all qualified youth has long been a major goal of our educational system. One measure of national progress toward that goal is the participation rates of different populations seeking higher education. Changes in the participation rates may reflect many different factors, such as changes in the ability to afford higher education or in the quality of secondary schooling. Such changes may also alert higher education institutions to the need for altering policies or offerings.

The proportion of traditional-college-age African-Americans and Hispanics enrolled in higher education increased in the early 1970s but declined in the second half of the decade. By the mid-1980s, the rates for both groups were above those of the early

1970s (U.S. Dept. of Education 1988, p. 126).

In the 1980s, participation rates of African-Americans and Hispanics were lower than those of whites. Enrollment of whites between 1970 and 1980 ranged between 25 and 27 percent, and in the last three years, it equaled or exceeded 28 percent (U.S. Dept. of Education 1988, p. 126).

Highlights of 1988 enrollments at 367 institutions indicate that:

- o Enrollments at 54 percent of American colleges and universities have increased since 1980.
- o In 1987-88, the majority of institutions reported overall gains in enrollments. A majority also reported increases in first-time freshmen.
- o Only one in four institutions reported increases in enrollments of African-Americans and Hispanics (U.S. Dept. of Education 1988, p. 126).

Adult Learners: The number of campus-based adult learners, particularly adult women, has grown significantly over the past 10 years. Nationwide, the proportion of college students age 25 and older rose from 29.2 percent in 1973 to 34.7 percent in 1978, an increase of approximately 1.25 million campus-based adult learners (Frances 1980).

Part-time Students: Part-time enrollments have long been part of American higher education. Continued increases in part-time graduate students could help offset some of the declines forecast for the next 20 years, but part-time enrollments are unlikely to

compensate for much of the future decline. The very factor that will reduce full-time enrollments will also reduce the number of part-time students--namely, the decline of college-age students in the population. The 18- to 22-year-old potential part-time student is also a potential full-time student. Any future increase in part-time enrollments probably will occur at the expense of full-time enrollments (Baldridge, Kemerer, and Green 1982, p. 9).

The changing demographics of the American population, particularly among young Americans, will profoundly affect higher education into the 21st century. The 25 percent decline in the traditional college-age population, dramatic changes in the racial/ethnic composition, and regional shifts will affect all but a small number of colleges and universities (Baldridge, Kemerer, and Green 1982, p. 15).

FINANCIAL AID

The number of students receiving financial aid has declined, and recipients have shifted from long-term degree programs to short-term vocational programs.

At a time when college costs have been rising somewhat ahead of inflation and the number of student aid recipients has declined, colleges developed a number of practices intended to ease the burden for families and students in meeting tuition costs. Extended payment plans are one example, in which payments for a year's tuition can be made monthly, extended over the full calendar year or even beyond graduation. Overall, 40 percent of all

institutions have extended payment plans. Another option is for a college or university to offer its own loan program, usually to supplement loan funds available through government-sponsored programs. One in three colleges offers such programs at present. Institutions have sometimes introduced differential tuition rates, recognizing that some degree programs (engineering, medicine, for example) are more costly than others. New interest is apparent in offering merit scholarships, which generally are not based on financial need (El-Khawas 1985, p. 5).

CHANGES IN CURRICULA

American higher education is going through a period of great change, when innovations and organizing principles on which higher education is established are coming into play. Implementation of new programs offers many opportunities for campus renewal and curriculum development, reevaluation of academic and administrative practices, and enhancement of community and institutional relationships (Waters 1985, p. 335).

The current confusion of purpose and programs in higher education reflects a search for meaning. These concerns have caused many educators to ask whether the curriculum has become irrelevant for a generation of students facing a rapidly changing, increasingly dangerous, and more complex world. Thus, it is not surprising that it is in the curriculum--especially in the undergraduate curriculum--where the issues underlying the call for reform meet. It is also only natural that so-called "general

education" would come to be seen as a catalyst for innovation as colleges and universities try to deal with these changes. For many, general education is the conscience of higher education, the part of a university that is concerned most directly with an individual student's responsibility to society at large (R. Miller 1988, p. 2).

Indeed, serious discussion of general education should be an urgent item on higher education's agenda. Advocacy of one particular subject area or another is common--for example, international education or computer literacy as a component of general education--but advocates see the issue from their own narrow perspectives and thus fail to see how the parts might fit together into an integrated, comprehensive curriculum (G. Miller 1988, p. 3).

Part of the problem for those who seek to cultivate general education is the lack of a definition that is widely accepted and is specific enough to have more than rhetorical value as the basis for establishing the content and methodology of a curriculum or to provide a basis for evaluation. Because in most institutions, changes in the curriculum result from action by the faculty, concrete curricular changes will occur only if the faculty are committed to them. Faculty, the final determiners of any curriculum, have become firmly attached to the research ethos, largely because of the reward system that colleges and universities have created (G. Miller 1988, p. 3).

Although the literature on general education is rich in

rationales that describe the need for curricular reform and strategies that can be employed to bring it about, surprisingly little information is available about the practical matter of implementing a new program once the faculty have agreed on its general shape. And though the process of reforming a college curriculum might very well be as difficult as moving a graveyard, putting those new reforms into effect and ensuring that the campus is fully prepared for them can be almost as difficult (Waters 1985, p. 335).

The real issue has centered around the methods of general education and their relationship to the goals and to the structure of the curriculum. It is here that confusion between liberal and general education inhibits action (G. Miller 1988, p. 169).

Because faculty initiate most curricular reforms, student support personnel sometimes fail to learn about the impending changes until the approval process is almost complete (Waters 1985, p. 335).

The challenge of developing the college curriculum and teaching techniques to cultivate or enhance the student's capacity for abstract logical reasoning and critical thinking (how to think, how to express thoughts in writing, and how to communicate to others) as a fundamental matter has become a major focus of educators in higher education institutions.

Educators in every discipline value critical thinking skills. Teaching for critical thinking does not take place in a vacuum. Students frequently bring with them a home culture and a peer

culture with norms that may be antithetical to critical questioning. Every course must therefore become a forum for debating global issues or questions of personal identity, suggesting that educators must help students discover purpose in their learning (Kurfiss 1988, p. 103). A problem or question that arouses students' sense of wonder can provoke the desire to understand a subject more fully and provide the motivation for sustained inquiry (Meyers and Rowan 1975).

The pressures on faculty to conduct and publish research and to train graduate students in their disciplinary specialties and the enormous numbers of teaching assistants who are responsible for much of undergraduate instruction often mean that instruction in writing at universities seems to take place despite the curriculum (Strenski 1988, p. 31).

COLLEGE AND UNIVERSITY FACULTY

To understand better the extent of the human resources represented by college faculty, it is useful to construct a profile of employment trends over the last few decades and to project manpower needs for faculty over the next few decades. Such a profile permits planners to analyze the number of faculty in each academic specialization and their current age and employment status. It also measures the production of new doctorates each year and relates the supply of new doctorates to demand for new faculty (Lee 1983, p. 29).

The financial pressures on colleges and universities in recent

years have sometimes led to faculty layoffs and, more frequently, to a considerable reduction in the hiring of full-time faculty and greater use of part-time faculty. In addition, faculty salaries generally have not kept pace with inflation. As a result, only one-third of institutions registered a net gain in full-time faculty positions, and 22 percent had a net loss in positions. Although most institutions did hire full-time faculty during the preceding year, such hiring apparently represents replacement of faculty who leave (El-Khawas 1985, p. 6).

The steady increase over recent decades in the number of part-time faculty employed in American higher education is a complex phenomenon. Nearly one in every three faculty is employed part-time, or more than 250,000 people. Thus, their influence on the quality and relevance of academic programs is a matter of importance to all concerned with the operation and effectiveness of higher education (Gappa 1984, p. 94).

The underrepresentation of minorities in faculty positions in higher education institutions is extremely serious. African-Americans make up about 4 percent of total faculty (Blackwell 1988), a decrease from an estimated high of approximately 6 percent in the late 1970s. Unfortunately, 4 percent includes all African-American faculty employed at historically black colleges and universities, suggesting very few are hired overall. Among the colleges that hired new faculty, most reported that women were among those hired, and about one-third reported that African-American or Hispanic faculty were hired. These figures reflect

institutional practices and mean that one minority or woman faculty member is hired within an entire college or university, if at all (El-Khawas 1985, p. 6).

Minorities are substantially more likely to hold nonfaculty positions in institutions of higher learning, as a group constituting 22.2 percent of all nonfaculty positions. According to data from 1983 on minorities in administrative positions in colleges and universities, African-Americans held 7.2 percent of the administrative positions, while whites occupied 89.7 percent (Blackwell 1988, p. 422).

The available data show that the number of faculty has increased steadily over the last decade, that tenure rates are considerably higher, and that the proportion of college faculty who are women or members of minority groups has somewhat increased (Lee 1983, p. 30). The numbers and proportions of tenured faculty are of particular significance in a time of fiscal stress for colleges and universities. Changing an existing program or initiating a new one is extremely difficult at a college with a high proportion of tenured faculty, for an institution must declare a state of financial exigency before it can legally lay off tenured faculty (Lee 1983, p. 32).

Nationally and across institutional types, the proportion of tenured faculty is not yet alarmingly high. In 1980-81, 65 percent of all full-time faculty were tenured. At public institutions, 68 percent of all faculty were tenured, while at private institutions, 56 percent of all faculty were tenured. In 1987-88, 63 percent of

the faculty were tenured (El-Khawas 1985, p. 7).

Faculty salaries continue to outpace inflation but have not regained the losses of the 1970s and early 1980s. The average faculty salary rose 4.9 percent in 1987-88, but when adjusted for a 4 percent rate of inflation, the average salary increased by only 1 percent. The rate of increase has been steadily declining, from 6.6 percent in 1984-85 to 6.1 percent in 1985-86 to 5.9 percent in 1986-87.

Faculty productivity must be increased to meet the increasingly tight financial circumstances that more and more colleges face. Merely increasing faculty course loads or requiring faculty to perform more research will not address the complex problems created by declining and shifting enrollments and by changing patterns of employment for college graduates. Creative solutions are needed, including the modification of reward systems to encourage faculty to be flexible and to learn new skills and new responsibilities. Activities like extrainstitutional projects, industry-university cooperation, and retraining can be rewarded with financial incentives, enhanced job protection, or added prestige.

Colleges can respond in many ways to fiscal pressures, making necessary organizational changes without terminating faculty. Between the extremes of shaping the faculty to fit the college and shaping the college to fit the faculty lies the opportunity to shape both the college and its faculty by recognizing the wider talents and interests of faculty, the broader potential of the

college, and the way in which both can be integrated (Lee 1983, p. 40).

Shortages of faculty continue in computer science, business, mathematics, and the health professions. Until about 1980, for example, schools of public health in the United States enjoyed a steady growth rate. The number of schools nearly doubled between 1958 and 1978, from 11 to 21 schools, and the number of students increased by more than 500 percent. According to the Bureau of Health Professions in Health and Human Services, a shortage exists of faculty and researchers with expertise in a number of high-priority subject areas--chronic disease, behavioral and environmental epidemiology, and environmental toxicology, including risk assessment of chemical and physical agents (Gemmell 1987, p. 1).

Promising young scholars who were squeezed out of a traditional faculty career for the last decade by a depressed academic job market are suddenly in demand. Many universities, worried by projections that one-third of the professoriat will have to be replaced over the next decade, are offering liberal arts scholars inducements like higher starting salaries, improved research facilities, money for travel and research, and promises that tenure will be available.

Because the academic job market has declined for a decade, the pool of young scholars headed for faculty careers has shrunk substantially. Many students who might once have gone to graduate school for a doctorate in liberal arts have gone to professional

schools instead or taken jobs in business and industry (Watkins 1986, p. 1).

Even with such efforts, many university officials worry that they will have trouble attracting the brightest members of a generation, enticed by lucrative professional and high-technology careers. As a result, some administrators have already begun to recruit young academics with new arts and sciences doctorates as replacements for professors who will not leave for another five or 10 years. Those administrators fear that competition will only get worse and that top-quality scholars will soon be in short supply (Watkins 1986, p. 1).

FINANCIAL STATUS

Inflation ravaged colleges and universities in the 1970s and continued to be one of the top concerns of higher education leaders in 1989. "Inflation is always important to an education institution because of the difficulty of keeping faculty salaries moving with the price index" (Meyerson and Johnson 1989, p. 15).

The consumer price index (CPI) for urban consumers, the most commonly used measure of inflation, increased at an average annual rate of approximately 6 percent between 1978 and 1988. The higher education price index has increased at a faster pace than the CPI since 1982, however, in part to "catch up" with the policy decisions of the 1970s. Faculty salaries, which have increased faster than inflation for the last eight years, are the most expensive component (Meyerson and Johnson 1989, p. 15).

The average tuition and required fees at public four-year institutions for school year 1987-88 were up 6 percent over the previous year; at private four-year institutions, average tuition and fees for 1987-88 were 8 percent above the previous year--marking the seventh year in a row that increases in college tuition outstripped inflation (Martin 1988, p. 673). Between 1985 and 1986, overall appropriations increased slightly more than 5 percent per year. Six states showed an increase of more than 10 percent per year, but 11 states averaged 1 percent or less per year. Tuition continues to be a primary source of income for private institutions. For 1987, 68 percent estimated that they would have to increase their tuition by at least 5 percent (El-Khawas 1985, p. 5).

The cost of college has always risen faster than the cost of living. Since 1980, it has outpaced inflation two to one (Werth 1988, p. 13).

Comparing increases in college costs with increases in family income is one way of trying to decide whether tuition is too high. In the 12 years preceding 1985, student charges at public universities increased 143 percent, while the median income for families with children in college increased 144 percent. Cost increases simply follow consumer income (Martin 1988, p. 674).

During the 1970s, colleges and universities tried to hold down costs by increasing faculty members' salaries at a level considerably below the rate of inflation. As a result, faculty members lost more than one-fifth of their purchasing power. By the

1980s, higher education faced a tough decision: to keep employees underpaid or give them raises well above inflation to make up lost ground. Colleges and universities have chosen to finance salary increases with tuition hikes (Martin 1988, p. 674).

While overall inflation has been going down, specific costs in higher education continue to increase at phenomenal rates. During the last 10 years, costs have more than doubled for books, supplies, outside services, and replacement equipment. Higher education is paying more for equipment and facilities (such as computers and laboratories for research and development) not only because the cost of those items has outpaced inflation but also because the federal investment in academic research and development has been declining (Martin 1988, p. 674). An estimated 18 percent of higher education institutions are in only fair or poor financial health (El-Khawas 1985, pp. 5-6).

As for tuition, no single point of view can lay exclusive claim to the moral high ground. The full view of tuition is both complex and improbable (Martin 1988, p. 673).

ASSESSMENT

Businesses and industries view quality assurance as crucial to their survival as graduates seek jobs requiring greater levels of expertise at the entry level. Inevitably, they expect higher education to produce college graduates who speak coherently, write clearly, compute accurately, think logically, and demonstrate in-depth knowledge and skills in a special field. Assessment is

considered crucial to assuring quality in the award of academic credentials and for feedback to improve curricula and instruction (Harris 1988, p. 65).

Assessing outcomes has become an important issue in colleges and universities for several reasons: the demand that institutions be more accountable, increasing reports from business and industry of dissatisfaction with the graduates they hire, criticisms of elementary and secondary schools that have spilled over to concerns about colleges and universities, the fact that accrediting associations increasingly call for institutions to demonstrate what "effects" they have on their students. No question: Colleges and universities must be thoughtful about the impact they have (Claxton, Murrell, and Porter 1987, p. 32).

Nearly half of all institutions have some form of assessment under way, and three-quarters of campus administrators expect some form to be introduced on their campus in the next few years (El-Khawas 1985, p. 8). About one-third of American colleges and universities have developed assessment in knowledge and general education subjects, knowledge in a major, critical thinking, quantitative problem solving, oral communication, and long-term outcomes.

Two basic issues concern assessment. First is the use or fear of misuse of assessment data. To many people within universities, assessment is perceived as a threat (Spangehl 1987, p. 39). Students and faculty may fear that assessment will affect their institution's admissions policies. Legislators are unlikely to see

all the subtle problems that are so obvious to academics and will press to see the bottom line for the institutions they fund and control. Accreditors also continue their demands that institutions document achievement of self-set goals. Whether volunteers or conscripts, institutions will find themselves assessing outcomes, and as elsewhere the volunteers are likely to be happy and the conscripts miserable. The anxiety that comes with assessment can be reduced and the benefits realized, but they require time, patience, and strong leadership (Spangehl 1987, p. 39).

Second is the methodology of assessment--what to measure, how to measure, and how to do it. Now the concern has shifted to a new standard: Under what conditions will an assessment lead to useful information, and who would be the client for the resulting information? (Marchese 1988, p. 23). This criterion for choice of method cuts two ways. It asks first about the utility of information for an intended purpose, whether revising a curriculum, evaluating a department, or advising a student. It then asks about the information's audience: Does an audience exist or does one need to be created? Of whom might it consist? What character or information would it want and find credible?

Colleges and universities need to look for ways to make assessment a flexible tool suited to their own needs. Two factors of assessment that are relevant to change should be noted: the complexity of most innovations in assessment and professional sensitivity toward assessment in general.

EPILOGUE

What emerges from this discussion of trends and issues is the tension between forces for change and the means to bring about needed changes.

Faculty are tenured, but a need exists to attract new, young scholars--before current faculty retire. A need also exists to encourage innovations in the curriculum and to seek better ways to assess student outcomes. Both activities must consider new student populations, part-time students, African-Americans and Hispanics, older students, and women, however. Scholars need to develop critical thinking skills, communication skills, and skills to compete in a technically oriented marketplace. And how will funds be made available to meet expenditures in higher education? How will students pay for their education? The ultimate question remains how to implement needed change in an environment that typically resists change. It appears that colleges and universities will have to find constructive and creative ways to deal with the new realities: part-time faculty, part-time students, and perplexity about what general education should be. The most important element in accommodating these emerging trends is the notion of colleges' and universities' goals based on a perception of a special mission as individual institutions. Given the diversity of American institutions of higher education, faculty and administrators working together should be able to develop effective ways to prepare students for their role in a more complex world.

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